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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/770,381 02/02/2004		Michael F. Mattei	146003-0001	9679	
24267	7590 01/10/2006		EXAMINER		
	ND MCKENNA, LLP	FINEMAN, LEE A			
BOSTON, 1	FALCON AVENUE MA 02210		ART UNIT	PAPER NUMBER	
			2872		
			DATE MAILED: 01/10/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)				
Office Action Summary		10/770,38	1	MATTEI, MICHAEL F.				
		Examiner	-	Art Unit				
		Lee Finem		2872				
Period fo	The MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence ad	dress			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory perion are to reply within the set or extended period for reply will, by state eply received by the Office later than three months after the manaded patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH 1.136(a). In no even d will apply and will ute, cause the appli	S COMMUNICATION at, however, may a reply be time expire SIX (6) MONTHS from cation to become ABANDONED). lety filed the mailing date of this c O (35 U.S.C. § 133).				
Status								
1)[\implies]	Responsive to communication(s) filed on <u>31 October 2005</u> .							
	This action is FINAL . 2b) ☐ This action is non-final.							
	·—							
-,ت	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.							
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)🛛	Claim(s) <u>1-8</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8) 🗌	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)	The specification is objected to by the Exami	ner.						
10)⊠ The drawing(s) filed on <u>04 February 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
	see the attached detailed Office action for a fi	st of the certif	ed copies not receive	u.				
Attach	tic)							
Attachmen 1) Notice	u(s) e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)			Paper No(s)/Mail Da	ate				
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 r No(s)/Mail Date	98)	5) Notice of Informal P 6) Other:	atent Application (PT	J-152)			

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DETAILED ACTION

This Office Action is in response to an amendment filed 31 October 2005 in which claims 1, 4 and 8 were amended. Claims 1-8 are pending.

Claim Objections

- 1. Claims 3, 7 and 8 are objected to because of the following informalities:
- Claims 3, 7 and 8 all include the limitation "grove" which should be --groove--.

 Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krewalk et al., US 4,682,091 in view of Lederman et al., US 2004/0150882 A1.

Regarding claim 4, Krewalk et al. disclose a telescope (10) comprising a tube (12), a prime focusing mirror and a secondary mirror (column 5, line 53, as a Schmitt type telescope it includes a prime focusing mirror and a secondary mirror) to form a real image behind the telescope (at eyepiece 14); a fork mount having a base (20, 22) and two arms (18a and 18b) to hold the telescope tube (figs. 2 and 8); a 45 degree angle reflector (unnumbered) deflects light from the telescope (10) by 90 degree (to the eyepiece), the 45 degree angle reflector attaching to

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external threads (shown by knurled ring in figs. 2 and 5) at the end of the telescope tube (12); and a cylindrical coupling member (part of 14) mated at a first end with a downstream opening of the 45 degree angle reflector (fig. 5). Krewalk et al. disclose the claimed invention except for explicitly stating that the cylindrical coupling member having a threaded coupling at a downstream end to which a CCD camera is attached so that the CCD camera clears the base of the fork mount when the telescope is in the 90 degree declination position. Lederman et al. teach in figs. 1-9 apparatus for connecting a remote viewer (e.g., a camera) to a telescope (page 1, section [0003]) including using conventional coupling techniques like appropriately matched sets of male and female (i.e. external and internal) threads to couple the optical components (see page 4, section [0035], lines 8-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the cylindrical coupling member of Krewalk et al. have a threaded coupling at a downstream end to attach the optical elements as threaded couplings are a reliable, commonly available way to connect elements. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to connect a camera to the cylinder coupling of Krewalk et al. as suggested by Lederman et al. to be able to record the viewed image. Further, Official Notice is taken that CCD cameras are very well known type of camera and it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the camera a CCD camera to be able to easily manipulate the digital image data. Finally, as shown in fig. 5 of Krewalk et al., the optical system (14) clears the base of the fork mount when the telescope is in the 90 degree declination position and even with the addition of the CCD camera to the end of the system it would still clear the base of the fork mount when the telescope is in the 90 degree declination position.

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Regarding claims 1 and 5, Krewalk et al. in view of Lederman et al. as set forth above, further disclose an axle (92, fig. 8, Krewalk) to rotate the fork mount along a first axis (B, fig 2, Krewalk) perpendicular to the base (20, 22, Krewalk) and parallel to the arms (18a and 18b, Krewalk), the base rotating about a location midway between the two arms, to cause the fork to rotate in right ascension when the axis points toward a celestial pole (column 5, line 66-column 6, line 3, Krewalk), rotatable attachments (36, Krewalk) to permit rotating the tube in a plane midway between the two arms of the fork mount (fig. 2, Krewalk), the plane substantially perpendicular to the base of the fork mount (fig. 2, Krewalk), to cause the tube to rotate in declination when the axis points toward a celestial pole (column 5, lines 62-66, Krewalk). Krewalk et al. in view of Lederman et al. as set forth above disclose the claimed invention except for including a field adjuster that is attached to the threaded coupling of the cylindrical coupling member and the CCD camera. Lederman et al. further teach in fig. 9 including a field adjuster (part C) in the system between the threaded coupling of the cylindrical coupling member and the CCD camera. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a field adjuster to the system to increase the flexibility of the telescope for a variety of observing applications (Lederman, page 6, section [0053], lines 29-32).

Regarding claims 2-3, 6-7 and 8, Krewalk et al. in view of Lederman et al. as set forth above disclose the claimed invention except for smooth internal mating surface in the downstream of the 45 degree angle reflector and a smooth external mating surface in the first end of the cylindrical coupling member, the smooth external mating surface fitting into the smooth internal mating surface of the 45 degree angle reflector, and a groove in the cylindrical coupling member and a setscrew in the 45 degree angle reflector, the setscrew mating with the groove to

hold the cylindrical coupling member securely in place. Lederman et al. further teach conventional coupling techniques like a sliding fit of appropriately sized concentric cylinders (i.e. smooth internal and external mating surfaces) and position locking (i.e. groove and setscrew) to couple the optical components (see page 4, section [0036], lines 24-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the 45 degree angle reflector and the cylindrical coupling member of Krewalk et al. in view of Lederman et al. have smooth internal and external mating surfaces and groove and setscrew as further suggested by Lederman et al. as sliding fit couplings are a reliable, commonly available way to connect elements.

Response to Arguments

4. Applicant's arguments filed 31 October 2005 have been fully considered but they are not persuasive.

Applicant argues on page 13-15 of the remarks that the prior art references of Krewalk et al. and Lederman et al. either taken single or in combination do not claim "a cylindrical coupling member mating at a first end with a downstream opening of the 45 degree angle reflector, and a threaded coupling at a downstream end of the cylindrical coupling member." The examiner respectfully disagrees. As stated in the 103 rejection above, Krewalk et al. disclose a cylindrical coupling member (part of 14) mated at a first end with a downstream opening of the 45 degree angle reflector (fig. 5). This member (part of 14) is cylindrical and at least couples the eyepiece lens to the 45 degree angle reflector. Krewalk et al. disclose the claimed invention except for explicitly stating that the cylindrical coupling member has a threaded coupling at a downstream

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end. Lederman et al. teach using conventional coupling techniques like appropriately matched sets of male and female (i.e. external and internal) threads to couple the optical components (see page 4, section [0035], lines 8-11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the cylindrical coupling member of Krewalk et al. have a threaded coupling at a downstream end to attach the optical elements as threaded couplings are a reliable, commonly available way to connect elements.

5. It is noted by the Examiner that the drawing and specification objections made in the previous Office Action have been withdrawn due to amendment by the Applicant.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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January 5, 2006